



# User Manual



## XPIN Clip

Copyright by Multi-COM Sp. z o.o.

## 1. XPIN CLIP

XPIN is standalone device used to read a screen lock code using Bruteforce method. XPIN clip can read Passcode (in iOS devices) as well as PIN / PIN Backup and character code (Pattern Lock) Android phones that supports OTG functions. Screen Lock password is a very good security measure in your phone. However, if you forget the code, the last and the only solution is to reset the phone that will erase all data and restore the device to factory settings.



**XPIN can be use only the rightful owner of the phone/device or person authorized by the owner to access their data from which you want to read the data. We are not responsible for illegal use – please check your country law before using this device.**

## 2. NOTE

In this manual, some information has been marked in a special way, by placing them in the box marked pictogram. Pay special attention to them:



In this way, we denote the relevant information associated with operating XPIN CLIP



In this way, we denote the information that is important from a safety, whose ignorance or inattention could lead to a situation carrying a high risk of damage od device and serious injury or death.

## 3. PLEASE READ BEFORE YOU BEGIN TO USE

This manual contains a lot of information very important from the point of view of safety and operation. So you have to read it carefully before using the device, making sure you understand well the entire contents. Otherwise, you run the risk of damage to the device or devices connected to it.



The unit's internal software XPIN CLIP probably still contains errors. We put a lot of effort into finding them, but you should assume that some errors still remained undetected. These errors can lead to give wrong information during working progress. If you experience such issues, please contact your dealer or manufacturer.

## 4. SPECIFICATION

	XPIN CLIP
Processor	ATMEL ATMEGA 2560
Light sensor	50K-100K GL5539
Screen	PCD8544 (Graficzny LCD 84x48)
Device power	5V DC from connected phone
Charging of phone	+5V DC from USB B power supply - max 2000 mA
Dimensions	130 mm x 83 mm x 35 mm
Weight	300g
Operating temperature	+5°C +30°C

## 5. CONSTRUCTION OF DEVICE



- A. Mini-jack socket for the connection itch light sensor
- B. USB A 3.0 connector for connection of phone/tablet
- C. USB B connector used while charging process of phone
- D. USB A Firmware update socket
- E. IDC socket for additional devices for XPIN Clip
- F. POWER LED – describes if device powered

- G. DATA LED – describes sending codes to phone
- H. CHARGE LED – describes if phone are charging due bruteforce attach
- I. FOUND LED - describes if code is found or not
- J. 7 switched to control and move over menu

- ⬅ ➡ ⬆ ⬇ (left, right, up, down)
- **SET**: accept settings
- **RUN**: run process
- **BREAK**: break bruteforce attack



***BREAK button has a dual function, if you are in the menu of your device by pressing this button you can TURN ON the LCD backlight. Note that clip will automatically turn off the backlight by pressing the RUN so by starting the recovery process PIN code in order to save energy.***



After finding the correct code for the device in addition to blue LED indicate it will also start signaling sound by buzzer. After finding the code to fully complete the process and switch off the light and sound signaling, press and hold the SET button.

## 6. CONNECTION OF CABLES AND SETTINGS

For correct connection of phones/tablets use dedicated cables and adapters that comes with device.



Connection using Lightning socket



Conneciton using 40 pin socket



Connection using normal cable



Connection using Charging cable

After connecting XPIN Clip to the phone, the display of XPIN first will show **serial number, recently found a PIN code and firmware version**. To go to the menu and start the work, press the **SET** button.

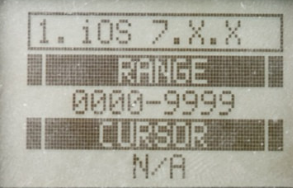





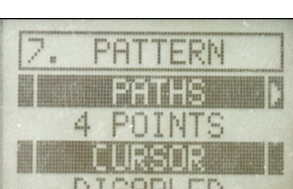


After starting the Clipa XPIN when displaying the serial number, you can calibrate the display contrast to button up (brighter contrast) button down (darker contrast) after pressing the SET button and go to the main menu, the settings will be saved.



If the XPIN is not powering ON while you connect it with phone please check first if this phone support OTG function. If not please try different cable from set to check if Clip is working conditaiothn - if problems arise, contact the manufacturer.

Clip-XPIN menu and is divided into 3 segments in the first row on the display we have to choose a system / device with which you want to recover your PIN, such as:

	<p><b>1. iOS 7.x.x:</b> 4 digit PIN on all devices based on iOS® 7.xx - iPhone®, iPad® and iPod®</p>
	<p><b>2. ANDROID PIN:</b> 4-8 digit PIN on all phones based on Android® support OTG USB (universal settings)</p>
	<p><b>3. PIN FOR HTC:</b> 4-8 digit PIN HTC® phones based on Android® that support USB OTG</p>
	<p><b>4. B. PIN 4.X FOR SAMSUNG:</b> 4-8 digit PIN Backup backup available when you enter an incorrect formula PatternLock in Samsung® Android® 4.xx support USB OTG</p>
	<p><b>5. B. PIN 5.X FOR SAMSUNG:</b> - 4-8 digit PIN Backup backup available when you enter an incorrect formula PatternLock in Samsung® Android® 5.x support USB OTG</p>
	<p><b>6. PIN FOR SONY:</b> 4-8 digit PIN from Sony® based on Android® 4.3+ support USB OTG</p>
	<p><b>7. PATTERN:</b> character code PatternLock of all Android® phones</p>

## **Frequently asked questions about the choice of the system:**

**Question:** I have an Android phone with a different brand than Samsung, HTC, Sony, which option should I choose?

**Answer:** If the device is not on the menu, choose Options **2. ANDROID PIN**

**Question:** I have a Sony phone with Android below version 4.3, which option should I choose **ANDROID PIN** or **PIN FOR SONY**?

**Answer:** **ANDROID PIN - PIN FOR SONY** is designed for Android 4.3+ systems, although they may catch exceptions and optional **PIN FOR SONY** work on a lower version.

**Question:** I have a Samsung phone with a PIN code which options to choose?

**Answer:** Options **for ANDROID** second **PIN** (it can happen that this option does not work, some Samsung phones have a bug that caused the suspension of a visual overlay TouchWiz after having several times entering the wrong PIN)

**Question:** What is the rate entering PIN codes, Backup PIN and PatternLock?






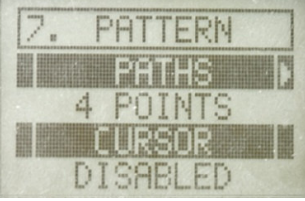
**Answer:** If the PIN code and the character code and a Backup PIN Patternlock Android 5.x is 5 attempts every 30 seconds for Backup PIN Android 4.xx is up to 60-80 attempts per minute.

**Question:** Are there any restrictions on the character code PatternLock?

**Answer:** In some cases, entering a code incorrectly 20-30 times, starting an alternative method of recovering and unlocking this method becomes impossible. The phones Sony is a "supplementary question" (no support for this method), the Samsung is the "Backup backup code PIN" - backup, choose a PIN depending on the version of Android. All phones based on "pure" Android without overlays producer or, for example. HTC phones have no such restrictions.

## **7. SELECTING METHOD OF CODE RETRIVE**

XPIN CLIP offers several methods of recovering the lock code, these options are available on the second line on the display:

	<p>- <b>RANGE:</b> This 4-digit range - the first four digits indicate the PIN of what we want to start looking, the next 4 numbers indicate at what we want to finish the PIN code. This option allows both codes search ascending and descending as if the PIN on the left will be bigger than the one on the right if you force a search descending ascending vice versa. In addition, when you press <b>BREAK</b> device remembers the last checked PIN.</p>
	<p>- <b>MASK:</b> 4 digital mask allows you to speed recovery if it is known to us at least one digit PIN code and its position.</p>
	<p>- <b>DATE:</b> This method is based on checking the codes that may be of date, currently in two configurations <b>DAY-MONTH</b> (day-month) and <b>MONTH-DAY</b> (month-day) in each of the option to search only 365 combinations.</p>
	<p>- <b>POPULAR:</b> This method uses a list of the most popular 4 digital PIN codes</p>
	<p>- <b>ADVANCED:</b> this method allows you to check the codes of more than 4 digits (up to 8), together with the use of masks to choose from search decreasing labeled <b>D</b> or marked increasing labeled <b>I</b></p>
	<p>- <b>PATHS</b> (only for options <b>PATTERN</b>) - this is the choice to choose the path length 4 and 5 points</p>

## Frequently asked questions about recovery methods

**Question:** Is the method **MASK** can I insert a well-known figure in any position?

**Answer:** Yes, Example: We know that the second digit of the PIN code is "1", therefore, the mask will look like this: **X1XX** - in this way we have to check only 1,000 combinations.

**Question:** What does the example. **100-30%** for the method **POPULAR**?

**Answer:** The first number is the amount of code that is checked 100 and what is the chance that the PIN is located in the selected pool's most popular codes in this case is a 30% chance.

**Question:** How to properly use the methods **ADVANCED**?

**Answer:** Example: **D\_ \_ \_ 1xxxx** - these settings mean, search, descending five-digit PIN which is known first digit, which is the number one.

**Question:** I would like to find character code PatternLock more than 5 points how to do it?

**Answer:** PatternLock more than 5 points is additional option, where the generated list of tracks will be introduced with an SD Memory Card (required for activation along with access to the server and adapter).

**Question:** How many combinations are codes 4 and 5 of the character?

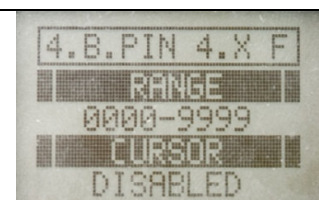
**Answer:** Approx.. 1600 for 4 spot and approx. 7000 to 5 points.

**Question:** If you break the process all over again if I have to start the search?

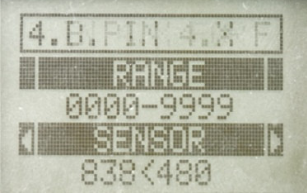


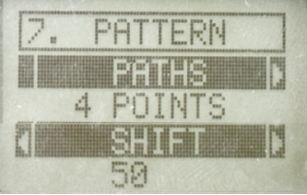
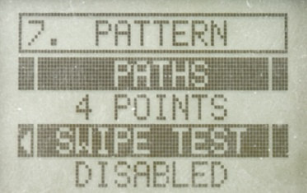
**Answer:** Currently, the search option at the start of the interruption is available to methods and PATTERN RANGE.

## 8. PARAMETRS CONFIGURATION

In the third line of the display clip XPIN additional parameters of supervising the correct lock code Recovery:



**CURSOR:** in some phones to approve the PIN code entered on the phone required is to click the appropriate button, usually "OK". You can use this method to emulate cursor and follow bruteforce attack on such phones.

	<p><b>SENSOR: (sensor światła)</b> parametr odpowiedzialny za zatrzymanie procesu odzyskiwania kodu PIN jeśli kod został znaleziony.</p>
	<p><b>TIMING:</b> parameter responsible for stopping the recovery process PIN code if the code has been found.</p>
	<p><b>CHARGING:</b> alternative option to charge your phone (based on Android) during the recovery process lock code. Due to the fact that the recovery may take several hours for the 4-digit PIN battery of the phone during this time may discharge, because XPIN Clip is powered directly from your phone. Due to the fact that it is not possible to properly charge the phone and use the USB OTG options at the same time, the above method may be used.</p>
	<p><b>SHIFT</b> (only for options <b>PATTERN</b>): is the ratio move the cursor, for each phone will be different, this is due to the fact that the phones have different resolutions and spit react to the acceleration of the movement of the cursor, this ratio is set individually for the data needs of the user.</p>
	<p><b>SWIPE TEST</b> (only for options <b>PATTERN</b>): testing the correctness move the cursor, using the parameter set in the options <b>SHIFT</b>.</p>

## Frequently asked questions regarding the configuration parameters

**Question:** How do I set the cursor to approve entering codes?

**Answer:** When you press **the SET** button, the cursor status changes from **Disabled** to **Enabled** since then using the left / right / up / down you can set the cursor to the desired position, after setting press **the SET button**. Currently parameter used in the method **B.PIN 4 .X FOR SAMSUNG** and **B.PIN 5.x FOR SAMSUNG**.

**Question:** How to improve the parameter options to choose **SENSOR?**

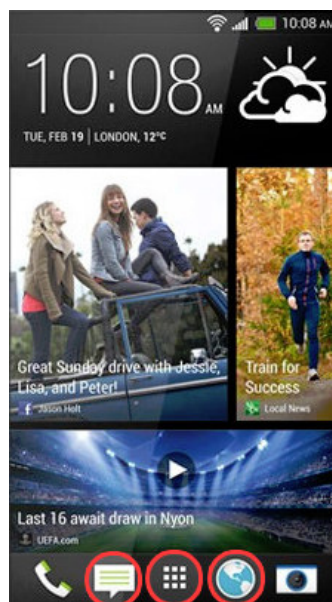
**Answer:** Example: **300 > 500** - the first number in this case **300** is the current intensity of the light, the sensor in total darkness reaches **0** and a maximum brightness of **999**. **Sign >** means to stop the process if the value on the left or reading from the sensor is greater than the set value, ie. **500**. This setting marks the transition portion of the screen area where the sensor is set in a darker brighter.

**Question:** How to correctly set the light sensor on the display?

**Answer:** Each phone has a distinctive arrangement of icons and interface depending on the manufacturer, so we can locate the best place for a light sensor. For example, in Sony icon application "menu" is clear and located in the middle at the bottom of the screen, Samsung phones after finding Backup phone will automatically enter the PIN lock tab screen in which the background is black in Android 4.XX or white in the Android 5.X .



Examples of the location of bright icons marked in red: Sony ® , HTC ® , Samsung ® :



**Question:** What if the code was found but when you try to enter it in the phone it gives information that the code is incorrect?

**Answer:** This will be the case if we set the last value in **TIMING** too short, this value is responsible for the time we set the brightness sensor to read screens. On some phones, screen unlocks after entering the correct code, some need even to 2 seconds, so sensor is unable to detect changes and clip enter another code. This is why in the upper part of the XPIN display you got "Prev" is a previously entered code and in this case we should use this code.

Example of parameter settings **TIMING: 0.1-0.5-1.0** such a setting is **0.1** seconds between entered PIN numbers, **0.5** seconds since the introduction last digit pin code for approval, **1.0** seconds in anticipation of the changes on the display if the code has been found.

**Question:** How does the method **CHARGING?**

**Answer:** This method consisting in the fact that after the introduction of a specific number of PIN codes process is stopped and charge the phone for a specified time - charger must be plugged into a USB connector B and the phone must be connected to a cable clip with CHARGING CABLE.

*Example: **60MIN / 2000PIN** - after entering PIN 2000 stop checking and recharge the phone for 1 hour.*



*Charging speed depends of used USB charger and phone itself. Chargers recommend this 5V 1A (1000mA)*



*The recommended option to the phone where the battery is built in and there is no possibility remove it from phone (as HTC M7 etc)*



*By using this parametr you extend bruteforce attack for time while phone will be charged during process. In case if only possible please connect phone to external power supply and DISABLE charging parameter in CLIP – also don't connect USB B to XPIN.*

**Question:** Is there a list of factors shift **Shift** option?

**Answer:** Currently, there is no such list - the user has to adjust according to the needs of this parameter.

**Question:** How to Calibrate the shift **SHIFT?**

**Answer:** Move the cursor to the first point PatternLocka, go to **SWIPE TEST** and press the **SET** button run the test, you will notice that the cursor moves to the right once again to the left if the cursor will travel from the first to the second point means that the setting is

correct if the cursor will move further than the second point, turn off the **SWIPE TEST** and reduce the value of SHIFT, move the cursor again not the first point and run **SWIPE TEST**.

**Question:** How do I set correctly the functions Pattern or PIN / BACKUPPIN ? When I run process clip begins to draw the pattern or enter the code pattern on the wallpaper.

**Answer:** Before starting the Clipa XPIN , enter manually several times some code / pattern until information on your phone information " try again in 30 seconds" appears. It's because XPIN clip after running enter code / pattern 5 times and waits 30 seconds and must have possibility to enter a code 5 times without prior warning appears locked for another 30 seconds.

## 5. SOFTWARE UPDATE

XPIN CLIP has the ability to update firmware using a USB connection.



To update the software :. To update provided by the manufacturer, follow these steps:

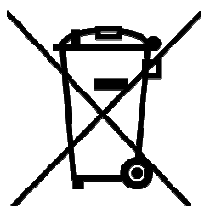
1. Save file delivered by reseller or manufacturer on HDD
2. Start the supplied software update.
3. Connect your device to the USB used to update the clip (Figure 5D) (required USB cable USB A- And that is not included)
4. Run the software and follow the instructions given on the computer screen.

## 6. WARNING AND SAFETY RULES

Before using the machine, check to be strictly the following safety information.

- The device is not a toy and should be kept away from children. Children are not aware of the risks and dangers that entails contact with electronic devices.
- The unit should be used only for work for which it is intended and only indoors.
- Do not connect power to a device other than a recommendation.
- Do not make any modifications to the construction of the device.
- Do not allow contact with water or other liquids, and must not operate with wet hands.
- Do not use or store the device in dusty, damp environment or in extreme high or low temperatures  
Failure to follow these guidelines could cause damage to and used in such conditions device may not operate properly or cause a hazard.
- Do not connect to other devices not supplied by the manufacturer cables / adapters - this can cause a danger of short circuits and damage the device.

## 6. ENVIRONMENT



The device is subject to the WEEE Directive 2002/96 / EC. This symbol indicates that the product must be disposed of separately and should be delivered to an appropriate waste collection point. It should not be disposed of with household waste. For more information, please contact your company or local authorities in charge of waste management.

## 7. PRODUCER INFORMATIONS:

Multi-COM Sp. z o.o.  
ul. 22-go Lipca 31b  
36-100 Kolbuszowa  
POLSKA

- **Tel:** +48 17 227 50 45, +48 17 227 00 25
- **Fax:** +48 17 227 50 45 wew. 728, wew. 729
- **Cell:** +48 607 506 646
- **Infolinia:** 0 801 671 717

- E-mail: [biuro@multi-com.pl](mailto:biuro@multi-com.pl)

All trademarks mentioned in this manual are trademarked by their respective owners. Product names, logos, commercial symbols, trade names (like Samsung, IOS, Iphone, Ipad), slogans are the property of their respective owners and are protected by international copyright laws and are used here only for informational purposes.